

EEC/COC Approval NO.: e11*2002/24*0874*00



MANUAL

READ THIS MANUAL CAREFULLY
it contains important safety information.

SPY RACING ATV

Content

Preface.....	1
Safe riding rules.....	2
Main specification.....	3
Main components name.....	4
Picture of parts.....	5
Speed meter.....	6
Ignition switch.....	7
Steering lock.....	7
Gasoline tank lock.....	7
Left right handlebar control system...	8
High-Low light switch.....	8
Direction signal switch.....	8
Horn Button.....	8
Lighting switch.....	8
Starting button.....	8
Emergency stop button.....	8
Throttle lever.....	8
Gears.....	9
Parking brake.....	10
Tires pressure.....	10
Throttle lever inspection.....	10
Lamp light.....	11
Turning device.....	11

All fasten nuts check.....	11
Adding water or antifreeze.....	11
Add butter.....	11
New vehicle anneal.....	12
Camshaft oil replacing.....	12
Spark plug inspection.....	13
Battery using	13
Fuse replace and inspection.....	14
Front and rear brake adjustment.....	15
Front parking brake adjustment.....	15
Engine idle speed adjustment.....	16
Tires regular inspection.....	16
Chain adjustment.....	16
Maintenance record.....	17
Electric wiring diagram.....	18
How to assemble.....	19

PREFACE

This 250cc and 300cc (350cc)ATV model is made for transportation tool as well as for sports racing, with reliable performance, and new design& beautiful style.

This manual introduces to you how to operate, and the basic maintain method. Before you ride it, please read it carefully, to ride and maintain it in correct way.

Also thanks for your buying and using our ATV. Wish you enjoy it with great comfort and pleasure in its long lifetime.

This manual is one important part of your bike, please keep it with you always.

Copyright © 2009-2019 belong to SPYRACING All rights reserved.

Safe riding adverting proceedings

1.Safe riding rules

- 1) All vehicle inspection before riding, to avoid the accident to avoid the accident or damaged parts
- 2) The driver must get the driving license before he drive. Don't let it be used by anybody with no driving license.
- 3) Please do as follows in order to avoid hurt:
 - a. Dress in bright clothes.
 - b. Don't close up to other motor vehicles.
 - c. Strictly obey the local transportation rule.
 - d. Accident cause of high speeding, so the speed must be lower than the limited max. speed of the road.
 - e. Turning, or changing its course, must turn on the turning light to let others pay more attention.
 - f. Be careful in driving on crossway, entrance exit of parking lots, fast lane.
 - g. The driver must operate the steering by two hands, control the brake by two feet, the other passenger also be safe by holding the grip or the driver, putting the 2 feet on the foot peg.

2. Exposure suit

- 1) To protect the driver to be security, the driver must wear the helmet, dust-proof veil, goggle, glove etc. safety outfit. And the passenger must wear the helmet too.
- 2) Please not wear too loose clothes.

3. Road surface condition

This model ATV design, limited for good road condition.

4. Strictly prohibit over loading run.

5. Drive no-no

Take medicine, or drink alcohol, especially alcohol, even a little.

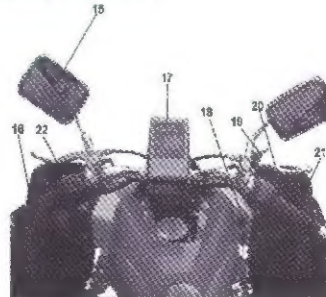
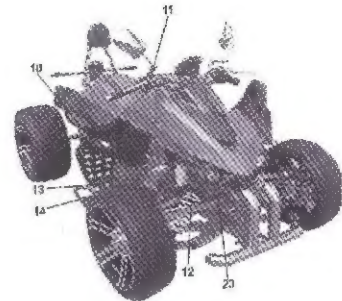
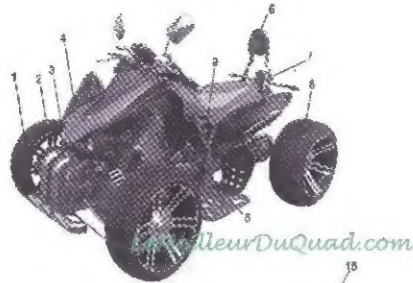
Main specification

Spec. Item	Data	Spec. Item	Data
Model No.	SPY350F1/ SPY250F1	Max. Speed	130KM/H 110KM/H
Length	1870(mm)	Ground clearance	110(mm)
Width	1185(mm)	Brake	One control three, hydraulic
Height	1040(mm)	Brake control	kick
Wheelbase	1400/1360(mm)	Fuel capacity	5.4L
Forward angle	27degree	Fuel Type	RQ90
Weight:	230/210 kg	Lubrication oil	SAE15W/40
Max. load capacity:	220/200 kg	Gear wheel oil	85W-140
Front tyre	185/30-14	Clutch	Manual
Rear tyre	270/30-14	Engine type	4strokes, 1cylinder, water-cooled
Battery	12V9AH	Lubrication method	Pressure splash
Ignition	CDI	Start	Electric
Compressure rate	10.2: 1	Cylinder displacement	(348.98ML)269ML
Bore × Stroke	83×64.5/72 × 66.2 (mm)	Sparkplug clearance	0.7MM
Max. poer :kw/(r/min)	22.0/7500/14.5/7000	Fuel consumption (L/100KM)	≤3.6

Main components name

1. Front wheel
2. Front bump
3. Head light
4. Turning light
5. Carburetor
6. Rear backrest
7. Rear light
8. Rear wheel
9. Gear shifter
10. Muffler
11. Gas tank
12. Water tank
13. Foot rest
14. Brake pedal
15. Mirror
16. Clutch level
17. Speed meter
18. Ignition switch
19. Parking brake
20. Brake level
21. Throttle level

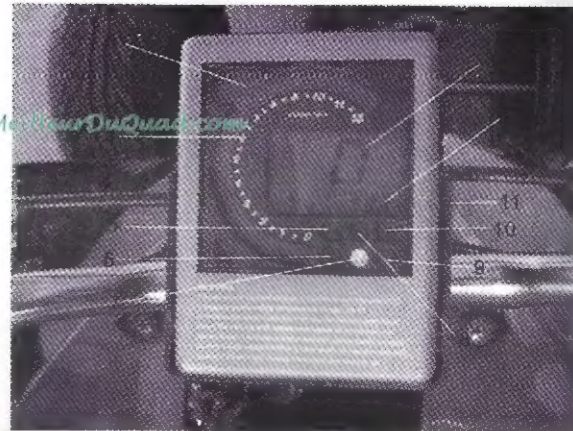
22. Handlebar switch
23. VIN



Main parts function and using method

Speed meter

- 1) Gear indicator
- 2) Engine speed
- 3) Speed
- 4) Total kilometer
- 5) Turn light
- 6) Neutral indicator
- 7) Reverse indicator
- 8) Far beam indicator
- 9) Near beam indicator
- 10) Caution light
- 11) Caution switch



Ignition switch, Steering lock, Gasoline tank lock

Total with two keys, please keep one of them well.

1) \varnothing ON

Whole electrocircuit closed, starting the engine, signal device works, cant exsert the key.

2) \square OFF

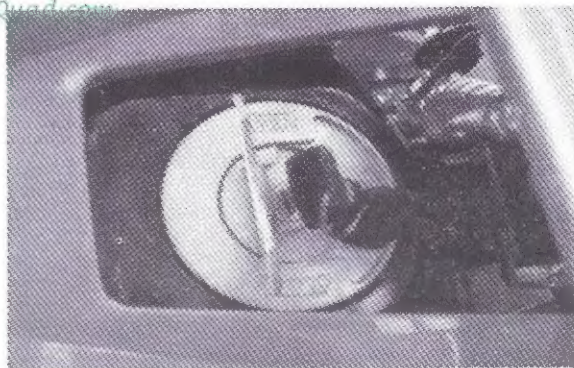
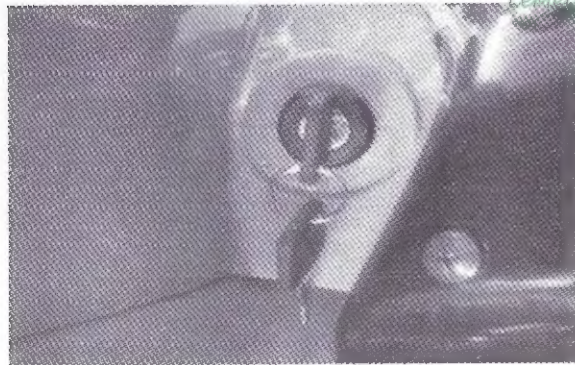
Cant start the engine, signal device cant work, can exsert the key.

3) Steering lock

Turn left utmost, key tuned to the core deasil, take out the key then steering locked cant be moved.

4) Gasoline tank lock

Turn the key to OPEN direction, then open the cap, key cant be cxsert, turn the key to CLOSE direction, key can be exsert, while oil tank locked.



Left Right handlebar control system

1) High & Low light switch (sign as pic.)

- a. When the switch placed on as pic., front head light Far beam works, speed meter high beam indicator works.
- b. When the switch placed on as pic., front head light low light works, speed meter low beam indicator works.

2) Direction signal switch (sign as pic.)

- a. Turn the switch to left, see as pic. Left turning light works, the vehicle turn left and speed meter left turning light indicator works.
- b. Turn the switch to right, see as pic. Right turning light works, the vehicle turn right and speed meter right turning light indicator works
- c. Cancel the signal of turning, place the switch to the middle, and press down.

3) Horn button (sign as pic.)

Press down, horn sound

4) Lighting switch

(sign as pic.) all lights crush out.

(sign as pic.) sidelights, rear light, speed meter light works *www.DuQuad.com*

(sign as pic.) sidelights, head light, rear light, speed meter light works

5) Starting button (sign as pic.)

When Start the engine, at Neutral gear, if on any other gears, hold the clutch lever to press down the starting button.

6) Emergency stop button

(sign as pic.) engine don't work, when at stopping condition.

(sign as pic.) normal works.

7) Throttle lever

Turn inside is speedup, contrarily speed down.



Gearlever

250cc, 300cc with 5 gears

R	N	1	2	3	4
Down			Up		



LeMeilleurDuQuad.com

Parking brake handlebar

When your bike is on gradient way, you can hold the parking brake handlebar, lock it up, then whole bike be parked.



Inspection before riding

1. Brake system

Inspect the front and rear brake condition, stroke size, if abnormality, need to adjust.

Hand operation, free stroke: 10—20mm

kick operation free stroke: 20—30mm

2. Tyre

Inspect the tyres pressure , check if it has wear and tear or broken, if yes, it must be adjusted or replaced. Cold tyre pressure as follows:

kpa(kg/cm) front: 175 (1.75) rear: 200 (2.00)

With passenger front: 196 (1.96) rear: 250 (2.50)

3. Throttle lever inspection and adjustment.

1. inspecting following conditions, make adjustment if need.
2. oil cable if enough length to turn to close to open.
3. If left and right turning handlebar, oil cable be long to stumble something, disturbing other parts.
4. check the handle operation free stroke, handle grip free stroke is 2-6mm, if not need to adjust.

4. Lamplight

Check if all lamplight be normal, if not adjust it.

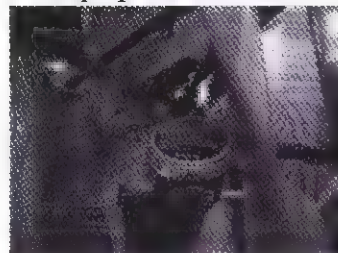
5. Turning device

Check the turning be smooth or not, if any block, need to adjust.

6. All fasten nuts

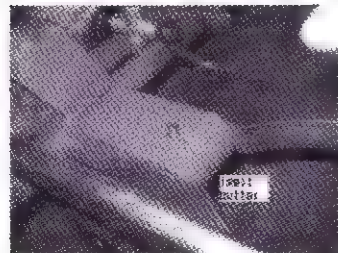
Check if they become flexible.

7. Top up the water bottle with water or antifreeze.



LeMeilleurDuQuad.com

8. Front arms fastness need to add butter periodical.



New Vehicle Anneal

New vehicle must have an anneal, good anneal can ensure it longtime us, anneal course of development is 1000km, during this period, don't load it too big charge, so don't ride it in high speed, don't headlong drive, try to avoid operating it in accelerograph complete open.

First Phase speed(0-500km) no more than 50km/h

Second Phase speed(500-1000km) no more than 60km/h

Before riding, make the engine oil cycle

After starting the engine, before riding, let the engine be in enough time to do idle running, which can make the oil flow to every important part of engine.

Time to do first inspection and repair

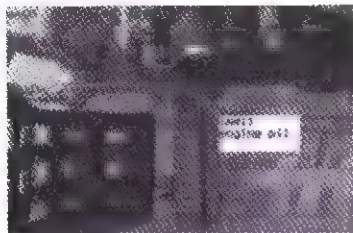
During Original 1000km driving period, repairing is very important, after the end of anneal time, you must adjust every part of engine, fasten every nut. Afresh replacing the engine oil.

LeMeilleurDuQuad.com

Camshaft oil replacing

- 1) After warming the vehicle, turn out the oil stick on the right up of engine, turn out the nut on the right down of engine, expanding completely the old oil.
- 2) Clean the nut, Replace the nut and fasten it tightly.

- 3) Inputting 0.75L lubricating oil, then screw the oil stick.
- 4) Starting the engine, stop it after several time working, check the oil place be between the up-down sign, if not enough, you must add more.



Spark plug inspection and adjustment

If spark plug has carbon store up, or electrode clearance too big, then it will not work or spark fire abnormal.

Clean away the carbon methods:

- 1) use the spark plug cleaner better.
- 2) also use the needle or grinding cone to clean

Spark plug electrode clearance is 0.7mm, use calipers to check. When cleaning the carbon, normal color of the fire is maple. If black color, super-cooling. If white and shining, that is over hot working, under both conditions, you must replace the spark plug.

Battery using explain

Batter using

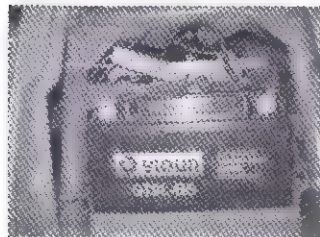
1. before using, charge it in 3-5 hours, starting performance be better, and extend the battery life.
2. Installation

- 1) first connect pole (+) (red sign), then connect pole (-), notice that don't connect them on the contrary, otherwise you will mangle the ignition, relay etc. electric attachments.

2) screw the nut, and lay on butter or Vaseline on the nut, lest rust make the badness connect.

Battery using explain

1. Each starting time not be more than 5 seconds, if several continuum starting cant work, you must check gasoline offering system and ignition system.
2. Following conditions make the battery over discharge or charge not enough, that can make battery life shorter.
 - 1) Frequent starting, among very short running distance.
 - 2) Long lasting low speed running.
 - 3) When running, hold the brake, and brake light on.
 - 4) Install other electrical accessories.
3. Difficult start, light dark, or horn not sound, you must charge again in time.
4. when the vehicle don't be used long time, you must charge it before put it in garage, and charge it one time each month.



LeMeilleurDuQuad.com

Fuse replace and inspection

Close the ignition switch, inspect if the the fuse be melted apart. If whole vehicle sudden no power, please inspect the fuse.

Fuse replacing accordant standard: 15A replace

Before replacing, please check the reason.

Front&rear brake adjustment

1. Front and rear one control three disc hydraulic brake

- 1) periodical(6 months or one year) inspect if the disc be fretted to the fret sign, and two disc must be replaced at the same time.
- 2)if the brake weak, no evident bounce, it is possible the hydraulic liquid not enough or oil pipe coming into air.
- 3)brake hydraulic liquid inspect if leave out, step the brake bar several time, to check if any liquid leave out from the brake pipe tie-in or main brake pump..
- 4)brake liquid renew, take off the main brake pump cap, renew the liquid to the up of sign "LOWEK", brake liquid No.DOT#3 or DOT4#.

2. Front parking brake adjustment

- 1.check the front brake bar's free stroke be 10mm-20mm, over tighten rover loose will affect the brake performance. Over tighten lead to brake dead, adjusting method: adjust brake cable nut or adjust rear brake free stroke. Over loose lead to brake nullity., then make the brake cable free stroke shorter.

LeMeilleurDuQuad.com



Engine idle speed adjustment

idle speed adjustment

1. put the vehicle on the plain road, starting the engine 10 minutes to warm the vehicle.
2. Circumrotate the throttle, adjust the carby idle speed to 1450-1550r/min



Tyre inspection

LeMeilleurDuQuad.com
You must inspect the front and rear tyre pressure regularly, when checking, let the tyre be in cold condition. When the front and rear tyre lines depth less than 1.6mm or wear and tear limit, please replace the tyres. Tyre chap or heavy damaged, please replace the tyres. Check the tyres to clean off the nail or small lapis etc.

Chain adjustment

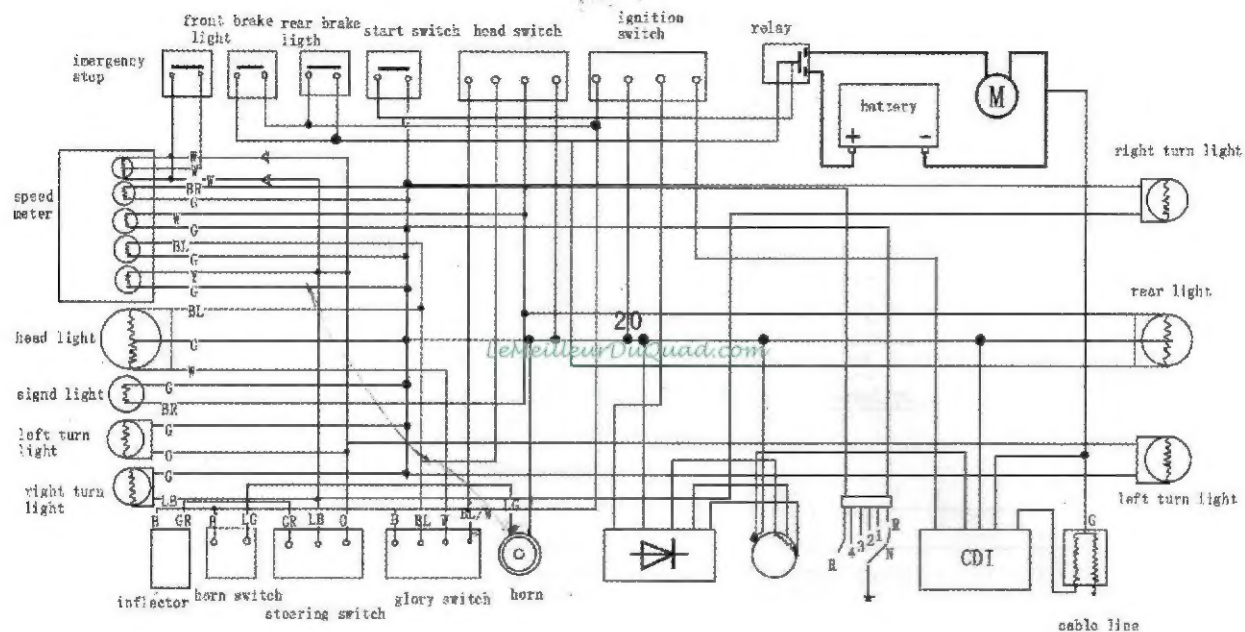
After driving a period of time, to check if the chain become loose, by adjusting the rear axle to fasten the chain.

- 1) Loosen the rear axle, lock up the bolt.
- 2) Loosen the rear brake fixing nut
- 3) by adjusting eccentricity of rear axle to fasten chain, and Circumrotate rear axle fixing nut and rear brake fixing hoop.

MAINTENANCE RECORD

Maintenance times, receipts of purchased components and assembly will be required to be recorded, which should be done according to the warranty. The chart below only acts as maintenance record, not as maintenance proof:

MAINTENANCE INTERVAL TIME	DATE OF MAINTENANCE	DRIVING MILEAGE	SERVICING DEALER NAME AND ADDRESS	REMARKS
1month				
3months				
6months				
12months				
18months				
24months				
30months				
36months				
42months				
48months				
54months				
60months				



Remove the packing and assemble explain

1. Remove the out packing

Take off the outside paper carton

2. Remove the iron frame

Take down the frame cover and all fixing nuts.

3. Assemble the turning system.

Fix the up-down arms ball end with M14 slot style nut, fasten tightly, plug into ringent pin.

1. fixing the turning shafts ball end with M10 slot style nut, fasten tightly, plug into ringent pin.

4. Assemble the handle bar aluminum connect block

1. fixing the block on the steering pole with 2pcs M10X30 inner-six-corner nut&bolt
2. fixing the handlebar between the up and down block with 4pcs M8×20 inner-six-corner bolt, and adjust the distance between left and right.

5. Assemble the speed meter

LeMeilleurDuQuad.com

1. fixing the speed meter on the aluminum block with 4pcs M5×10 half round screw.
2. connect the double-jumping switch, take down the three M3X12 screw, fixing the speed meter on the speed meter seat.

6. Install front cover

Fit the front cover block button into the block groove, fixing it on the front clothing body with M6×20 flat bolt&nut.

7. Assemble the battery

1. put the positive pole(red line) by bolt on the battery's anode(red)
2. put the cathode line(green) by bolt on the battery's cathode line(black).

3. open the ignition switch to check the electrical line, if it works well.

8. Assemble the seat

1. put the front and rear block button into the front and rear block seat of the frame.

9. Assemble the back rest

Fixing the back rest on the rear carrier with M8×20 bolt nut.

10. Assemble the tires

Fixing the front and rear tyre&rim on the front and rear turning system with M10 wimble nut.

LeMeilleurDuQuad.com